FACT SHEET

as required by LAC 33:IX.2411, for draft **Louisiana Pollutant Discharge Elimination System Permit No.** LA0067083; AI 19201; PER20050001 to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** City of Sulphur
Sulphur Regional Wastewater Treatment Facility
Post Office Box 1309
Sulphur, LA 70664

II. **PREPARED BY:** Todd Franklin

DATE PREPARED: July 10, 2006

III. **PERMIT ACTION:** reissue LPDES permit LA0067083, AI 19201; PER20050001

The City of Sulphur is constructing a new wastewater treatment facility to replace the existing 6 MGD dual stage activated sludge process with a Sequencing Batch Reactor (SBR). This new facility will be rated for 9.00 MGD to accommodate flows until the design year 2030. According to an e-mail from Mr. Wayne Harris on May 19, 2006, the new treatment plant should be on-line by March 2007.

LPDES application received: February 14, 2005

EPA has retained enforcement authority.

LPDES permit issued: February 1, 2000
LPDES permit expired: January 31, 2005

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the City of Westlake, the City of Sulphur, and nearby unincorporated areas.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located at 3400 Bayou D'Inde Road in Westlake, Calcasieu Parish.

D. The new treatment facility will consist of a gravity interceptor, an influent pump station, an influent mechanical drain screen, an influent grit removal, a Sequencing Batch Reactor (SBR), a post SBR Flow equalization, tertiary filter transfer pumps, tertiary filters, ultra violet radiation, a sludge digester, a sludge belt press system and load out conveyors.
The current treatment facility is a dual stage activated sludge process consisting of influent screw pumps, mechanical bar screen, grit removal, primary clarifiers, suspended growth

aeration basins, attached growth biological oxidation unit, secondary clarifiers, tertiary filter transfer pumps, tertiary filters, ultraviolet disinfection, anaerobic digester, and sludge belt press system. This system will remain in service until completion of the new treatment facility.

E. Outfall 001

Discharge Location: Latitude 30° 11' 14" North
Longitude 93° 18' 15" West

Description: treated sanitary wastewater

Design Capacity: 9.0 MGD

Type of Flow Measurement which the facility is currently using:

Rectangular Weir With Combination Totalizing Meter/Continuous Recorder

V. RECEIVING WATERS:

The discharge is into a parish drainage ditch; thence into the Calcasieu Ship Channel in segment 030301 of the Calcasieu River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of the parish drainage ditch; thence into the Calcasieu Ship Channel is 1,667 cfs.

The **hardness value** is 977.65 mg/l and the **fifteenth percentile value for TSS** is 10.50 mg/l.

The designated uses and degree of support for Segment 030301 of the Calcasieu River Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	N/A	N/A	N/A	N/A

[1/] The designated uses and degree of support for Segment 030301 of the Calcasieu River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 030301 of the Calcasieu River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005, from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 030301, Calcasieu River and Ship Channel-Saltwater Barrier to Moss Lake, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 030301 was previously listed as impaired, for which the below TMDL has been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to

modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL has been established for subsegment 030301:

Total Maximum Daily Load for Toxics for the Calcasieu Estuary

As per the TMDL, "EPA's 303(d) List identifies priority organics, contaminated sediments, copper, mercury, and ammonia as pollutants causing impairment of this subsegment (030301)." The following are the TMDL results for each of these pollutants:

Priority Organics – as per the TMDL, priority organics are addressed through whole effluent testing for this facility.

Ammonia – as per the TMDL, "There is no evidence that ammonia is causing impairment of this subsegment (030301), and ammonia should be delisted for this subsegment."

Copper – This TMDL listed wasteload allocations of copper for many facilities located in subsegment 030301. The City of Sulphur was given a wasteload allocation of 7.6 lbs/day daily maximum. The previous permit contained more stringent copper limitations (0.73 lb/day monthly average and 1.73 lb/day weekly average). However, a review of the new application submitted on February 14, 2005, and lab results for copper over the past eight quarters revealed that the average concentration of copper from the treatment facility was less than the MQL. Therefore, the less stringent limitation of 7.6 lbs/day daily maximum shall be placed into the permit. This is in accordance with LAC 33:IX.2361.L.2.a.ii, which states that availability of information which was not available at the time of previous permit issuance and will justify the application of less stringent effluent limitations in the proposed permit, constitutes an exception to LAC 33:IX.2361.L.1 which states when a permit is renewed or reissued standards or conditions must be at least as stringent as the final limitations, standards, or conditions in the previous permit.

Mercury - This TMDL listed wasteload allocations of mercury for many facilities located in subsegment 030301. The City of Sulphur was given a wasteload allocation of 0.0524 lb/day daily maximum. Therefore, this limitation shall be placed into the permit.

Contaminated Sediments – According to the TMDL, Louisiana should monitor sediment toxicity at least once every five years at five different sites within the subsegment. If sediment toxicity remains after implementation of the above pollutant TMDLs, the state should undertake a toxicity identification evaluation (TIE) to determine the pollutant or pollutants responsible for sediment toxicity. Once a determination is made, appropriate point source and nonpoint source controls can be implemented to reduce sediment toxicity.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	2,252	30 mg/l	45 mg/l	Limits are set in accordance with the Calcasieu River TMDL (WLA 88.03).
TSS	2,252	30 mg/l	45 mg/l	Limits are set in accordance with the Calcasieu River TMDL (WLA 88.03).

Priority Pollutants

Effluent Characteristic	Daily Maximum	Basis
Copper[1]	7.6 lbs/day	Limits are set in accordance with the *Total Maximum Daily Load for Toxics for the Calcasieu Estuary*.
Mercury[2]	0.0524 lb/day	Limits are set in accordance with the *Total Maximum Daily Load for Toxics for the Calcasieu Estuary*.

1 As per the TMDL for Toxics for the Calcasieu Estuary a daily maximum copper limitation of 7.6 lb/day is being placed in this permit. The TMDL additionally requires that each facility should monitor process effluents at least quarterly for copper, using clean techniques, to demonstrate compliance with the assigned wasteload allocation. LDEQ regards the term *should* to allow for flexibility in implementation of the TMDL. Because the copper wasteload allocation for the City of Sulphur when calculated as micrograms/liter ([7.6 lb/day / (8.34 x 5.55 MGD)] *1000 = 164 µg/l) is above the current LDEQ minimum quantification level for copper (10 µg/l), clean techniques will not be required for monitoring of copper in this permit. Utilizing the currently approved MQL and associated test method(s), LDEQ feels compliance with the assigned copper wasteload allocation will be demonstrated for this discharge.

2 As per the TMDL for Toxics for the Calcasieu Estuary a daily maximum mercury limitation of 0.0524 lb/day is being placed in this permit. The TMDL additionally requires that each facility should monitor process effluents at least quarterly for mercury, using clean techniques, to demonstrate compliance with the assigned wasteload allocation. LDEQ regards the term *should* to allow for flexibility in implementation of the TMDL. Because the

mercury wasteload allocation for the City of Sulphur when calculated as micrograms/liter ([0.0524 lb/day / (8.34 x 5.55 MGD)] *1000 = 1.1 µg/l) is above the current LDEQ minimum quantification level for mercury (0.2 µg/l), clean techniques will not be required for monitoring of mercury in this permit. Utilizing the currently approved MQL and associated test method(s), LDEQ feels compliance with the assigned mercury wasteload allocation will be demonstrated for this discharge.

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, September 27, 2001 VERSION 4).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:
The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0067083, **Biomonitoring Section** for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
Chronic static renewal 7-day larval survival & growth test using Menidia beryllina (Method 1006.0)	Once / Quarter[1]
Chronic static renewal 7-day survival & growth test using Mysidopsis bahia (Method 1007.0)	Once / Quarter[1]

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 1.0%, 1.4%, 1.8%, 2.4%, and 3.3%. The low-flow effluent concentration (critical low-flow dilution) is defined as 2.4% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

[1] If there are no significant lethal or sub-lethal effects demonstrated at or below the critical dilution during the first four quarters of testing, the permittee may certify fulfillment of the WET testing requirements to the permitting authority and WET testing may be reduced to not less than once per six months for the more sensitive species (*Mysidipsis bahia*) and not less than once per year for the less sensitive species (*Menidia beryllina*) for the remainder of the term of the permit. Upon expiration of the permit, the monitoring frequency for both species shall revert to once per quarter until the permit is re-issued.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0067083: Effective: February 1, 2000
Expired: January 31, 2005

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD_5	30 mg/l	45 mg/l	5/week	12-Hour Composite
TSS	30 mg/l	45 mg/l	5/week	12-Hour Composite
TRC	less than 0.1 mg/l		2/week	Grab
Fecal Coliform Colonies/100 ml	200	400	5/week	Grab
pH	Range (6.0 su – 9.0 su)		5/week	Grab
	Monthly Avg.	Daily Max.		
Copper	0.73 lb/day	1.73 lbs/day	1/quarter	24-Hour Composite
Mercury	0.053 lb/day	0.125 lb/day	1/quarter	24-Hour Composite

	Monthly Avg.	48-Hour		
Biomonitoring	Minimum	Minimum		
Menidia beryllina	Report	Report	1/year	24-Hour Composite
Mysidopsis bahia	Report	Report	1/6 months	24-Hour Composite

The permit contains biomonitoring.
The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed during the period beginning May 2004 and ending May 2006 for this facility.

Date – May 28, 2004
Inspector - LDEQ
Findings and/or Violations -

1. The city is registered as a generator of waste tires, but the City of Sulphur does not accumulate waste tires.
2. No areas of concern were noted at the facility.

A Hurricane Impact Damage Audit was received on January 26, 2006.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement actions administered against this facility:

LDEQ Issuance:
Enforcement Tracking No. WE-C-01-0199
Date Issued - November 4, 2002
Findings of Fact:

1. The Respondent owns and/or operates a sanitary wastewater treatment facility located at 3400 Bayou D'Inde Road in Sulphur, Calcasieu Parish, Louisiana. LPDES permit LA0067083 was issued with an effective date of February 1, 2000, and expires January 31, 2005. The LPDES permit authorizes the Respondent to discharge treated sanitary wastewater into an unnamed ditch; thence into the Calcasieu Ship Channel, both waters of the state. The Respondent is in the process of upgrading its treatment plant to be operational by January 2004.
2. An inspection on March 16, 2001, revealed that Respondent's in-house lab daily temperature logs for the TSS oven and the sample refrigerator did not indicate the adjustments made when the temperature was out of range.
3. Further inspection on March 16, 2001, revealed that Respondent failed to conduct its monitoring according to approved test procedures. Specifically, the Fecal Coliform test plates are not

counted as described in Standard Methods 18th Edition and the sterile buffer rinse water bottles were being saved and reused. These bottles are designed for single use and any unused solution is to be discarded.

4. Further inspection on March 16, 2001, revealed that the Respondent's flow device was not properly installed; therefore, manual flow check could not be completed.
5. Further inspection on March 16, 2001, revealed that the Respondent failed to submit DMRs to the Southwest Regional Office as required by the permit.
6. An inspection on March 28, 2001, in response to a citizen complaint, revealed that Respondent did cause or allow the unauthorized discharge of untreated wastewater onto adjacent property, thence into the lateral 2 canal, thence into Bayou D'Inde, all waters of the state.
7. Further inspection on December 3, 2001, revealed that the NIST thermometer had not been calibrated since 1993.
8. A review of the DMRs on October 9, 2002, revealed the following effluent violations from February 2000 through July 2002:

Date	Parameter	Permit Limit	Sample Results
8/00 – 10/00	Total Copper (30 day avg.)	0.73 lb/day	0.854 lb/day
11/00 – 1/01	Total Copper (30 day avg.)	0.73 lb/day	1.26 lb/day
11/01 – 1/02	Total Copper (30 day avg.) Total Copper (daily max.)	0.73 lb/day 1.73 lb/day	2.28 lbs/day 8.40 lbs/day
1/02	Fecal Coliform (weekly avg.)	400 col./100 ml	645 col./100 ml
2/02 – 4/02	Total Copper (daily max.)	1.73 lb/day	1.93 lb/day

9. A file review on October 9, 2002, revealed the following overflows as reported by the Respondent from February 2000 through August 19, 2002:

DATES OF OVERFLOWS	LOCATION OF LIFTSTATION	COMMENTS
4/3/00	Hollywood	Motor pump failed during a thunderstorm
10/9/00	Arizona Street	Control breaker tripped out
3/4/01	Rose Park	Malfunction of control paraflow caused pumps to fail to come on
3/28/01	Lyons Street	Severe thunderstorm
3/28/01	Rose Park	Severe thunderstorm
4/26/01	Hollywood	Power interruption; no service
6/8/01-6/9/01	Lyons Street	Severe thunderstorms, excessive rainfall for approx. 6 days
6/8/01 – 6/9/01	Rose Park	Severe thunderstorms, excessive rainfall for approx. 6 days
6/8/01 – 6/9/01	Starlin Street	Severe thunderstorms, excessive rainfall for approx. 6 days
6/9/01	Hollywood	Severe thunderstorms, excessive rainfall
6/10/01	Starlin Street	Pump went air bound during high flows from excessive rainfall
08/29/01 – 08/30/01	Treatment Plant	Severe weather, and extremely high flows

11/28/01	Bayou D'Inde	Electrical problems at liftstation
12/13/01	Lyons Street	Severe thunderstorms, excessive rainfall
12/17/01	Rose Park	Burnt control relay at station. Pumps could not come on.
1/5/02 – 1/7/02	Hollywood	Power outage due to thunderstorm
3/01/02	Lyons Street	No information available
4/8/02	Lyons Street	Severe thunderstorms, excessive rainfall
4/8/02	Rose Park	Severe thunderstorms, excessive rainfall
6/12/02	Hwy. 108	Pressure control lines malfunction
7/30/02	Hollywood	Power outage due to blown transformer
8/19/02	Manhole on Bayou D'Inde	Wash out due to high flow caused by severe thunderstorm

Order:

1. To immediately take any and all steps necessary to meet and maintain compliance with LPDES permit LA0067083.
2. The Respondent shall accomplish the following tasks and comply with the following schedule of activities:

ACTIVITY	DUE DATE
1. Commence Construction Improvements	Ongoing
2. Complete Construction Improvements	December 2003
3. Attain Final Permit Compliance	January 2004

The Respondent shall submit construction progress reports during the months of June and December of each year, until completion of the proposed improvements. Within 14 days of any due date specified in the schedule above, the Respondent shall submit a certification of compliance or non-compliance with that activity. If the Respondent reports a non-compliance of a schedule event, the certification shall include a discussion of the cause of the delay, an anticipated date of completion and a discussion of any impairment of a subsequent due date.

3. To submit to the Enforcement Division a complete written report that shall include a detailed description of the circumstances of the cited violations, and the actions taken to achieve compliance with the Compliance Order.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 2004 through March 2006 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
TSS, Monthly Avg.	001	January 2004	1,501 lbs/day	1,508 lbs/day
TSS, Weekly Avg.	001	January 2004	45 mg/l	60.8 mg/l
Fecal Coliform, Weekly Avg.	001	January 2004	400 col/100 ml	497 col/100 ml
Fecal Coliform, Monthly Avg.	001	February 2004	200 col/100 ml	587 col/100 ml
Fecal Coliform, Weekly Avg.	001	February 2004	400 col/100 ml	1,919 col/100 ml

TSS, Weekly Avg.	001	March 2004	45 mg/l	52.0 mg/l
Fecal Coliform, Weekly Avg.	001	March 2004	400 col/100 ml	440 col/100 ml
TSS, Weekly Avg.	001	April 2004	45 mg/l	45.5 mg/l
Fecal Coliform, Weekly Avg.	001	May 2004	400 col/100 ml	448 col/100 ml
TSS, Monthly Avg.	001	June 2004	1,501 lbs/day	1,604 lbs/day
TSS, Weekly Avg.	001	June 2004	45 mg/l	71.2 mg/l
Fecal Coliform, Weekly Avg.	001	June 2004	400 col/100 ml	539 col/100 ml
Fecal Coliform, Weekly Avg.	001	October 2004	400 col/100 ml	585 col/100 ml
TSS, Weekly Avg.	001	November 2004	45 mg/l	52.7 mg/l
Fecal Coliform, Monthly Avg.	001	November 2004	200 col/100 ml	276 col/100 ml
Fecal Coliform, Weekly Avg.	001	November 2004	400 col/100 ml	492 col/100 ml
Fecal Coliform, Weekly Avg.	001	December 2004	400 col/100 ml	1,414 col/100 ml
TSS, Monthly Avg.	001	January 2005	1,501 lbs/day	1,614 lbs/day
TSS, Monthly Avg.	001	February 2005	1,501 lbs/day	2,705 lbs/day
TSS, Monthly Avg.	001	February 2005	30 mg/l	47.6 mg/l
TSS, Weekly Avg.	001	February 2005	45 mg/l	64.3 mg/l
Fecal Coliform, Monthly Avg.	001	February 2005	200 col/100 ml	356 col/100 ml
Fecal Coliform, Weekly Avg.	001	February 2005	400 col/100 ml	511 col/100 ml
TSS, Monthly Avg.	001	March 2005	1,501 lbs/day	1,606 lbs/day
TSS, Monthly Avg.	001	March 2005	30 mg/l	36.3 mg/l
TSS, Weekly Avg.	001	March 2005	45 mg/l	89.8 mg/l
Fecal Coliform, Monthly Avg.	001	March 2005	200 col/100 ml	293 col/100 ml
Fecal Coliform, Monthly Avg.	001	April 2005	200 col/100 ml	333 col/100 ml
Fecal Coliform, Weekly Avg.	001	April 2005	400 col/100 ml	526 col/100 ml
TSS, Weekly Avg.	001	May 2005	45 mg/l	75.1 mg/l
TSS, Monthly Avg.	001	July 2005	1,501 lbs/day	2,073 lbs/day
TSS, Monthly Avg.	001	July 2005	30 mg/l	38.8 mg/l
TSS, Weekly Avg.	001	July 2005	45 mg/l	69.3 mg/l
Fecal Coliform, Monthly Avg.	001	October 2005	200 col/100 ml	367 col/100 ml
Fecal Coliform, Weekly Avg.	001	October 2005	400 col/100 ml	572 col/100 ml
Fecal Coliform, Monthly Avg.	001	November 2005	200 col/100 ml	374 col/100 ml
Fecal Coliform, Weekly Avg.	001	November 2005	400 col/100 ml	1,222 col/100 ml
TSS, Weekly Avg.	001	December 2005	45 mg/l	51.2 mg/l
TSS, Monthly Avg.	001	January 2006	1,501 lbs/day	2,202 lbs/day
TSS, Monthly Avg.	001	January 2006	30 mg/l	59.3 mg/l
TSS, Weekly Avg.	001	January 2006	45 mg/l	85.8 mg/l
Fecal Coliform, Monthly Avg.	001	January 2006	200 col/100 ml	776 col/100 ml
Fecal Coliform, Weekly Avg.	001	January 2006	400 col/100 ml	1,549 col/100 ml
TSS, Monthly Avg.	001	February 2006	1,501 lbs/day	1,574 lbs/day
TSS, Monthly Avg.	001	February 2006	30 mg/l	44.3 mg/l
TSS, Weekly Avg.	001	February 2006	45 mg/l	131 mg/l
Fecal Coliform, Monthly Avg.	001	February 2006	200 col/100 ml	338 col/100 ml
Fecal Coliform, Weekly Avg.	001	February 2006	400 col/100 ml	972 col/100 ml
TSS, Weekly Avg.	001	March 2006	45 mg/l	56.8 mg/l
Fecal Coliform, Weekly Avg.	001	March 2006	400 col/100 ml	451 col/100 ml
Total Copper, Monthly Avg.	001	May 2005 – July 2005	0.73 lb/day	1.08 lb/day

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 9.0 MGD.

Effluent loadings are calculated using the following example:

BOD_5: 8.34 gal/lb x 9.0 MGD x 30 mg/l = 2,252 lb/day

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 5.00 and 10.00 MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	5/week	12 Hr. Composite
Total Suspended Solids	5/week	12 Hr. Composite
Fecal Coliform Bacteria	5/week	Grab
Biomonitoring		
Menidia beryllina (Method 1006.0)	1/quarter	24 Hr. Composite
Mysidopsis bahia (Method 1007.0)	1/quarter	24 Hr. Composite
pH	5/week	Grab
Copper	1/quarter	24 Hr. Composite
Mercury	1/quarter	24 Hr. Composite

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Environmental Impact Questionnaire:

Applicant Comments/Responses (verbatim from applicant)

1. Have the potential and real adverse effects of the proposed facility been avoided to the maximum extent possible?

   The proposed facility is to be located adjacent to the existing wastewater treatment facility. There will be no change in the location of the discharge outfall. The new process facility will

significantly improve existing effluent quality. UV disinfection eliminates chlorine and sulphur dioxide use thereby reducing use of toxic chemicals. The proposed facility discharge provides improvements to the existing discharge and reduces the current potential & real adverse effects of the present facility.

2. Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

   The use of UV disinfection in lieu of chlorine & sulphur dioxide will provide a positive social/economic benefit as well as a positive environmental-impact benefit. The proposed SBR facility to be built adjacent to the existing facility will have an economic cost impact due to construction costs & higher O&M costs but these impacts are necessary & unavoidable to improve (lessen) the environmental impact of the quality of discharge of the existing facility.

3. Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing nonenvironmental benefits?

   No other alternative projects offer more protection to the environment than the proposed facility. The existing facility is operating above ideal design conditions and cannot be significantly improved by O&M procedures. Limitations in the availability of lands & the requirements to maintain operation of the existing facility during construction precludes most other alternatives. The proposed facility provides better environmental protection & does not unduly curtail nonenvironmental benefits.

4. Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing nonenvironmental benefits?

   All of the existing transport systems from the City of Sulphur & City of Westlake terminate at the existing wastewater plant site. The proposed facility will be located adjacent to the existing system and will connect to the existing transport system & will discharge to the existing outfall. The location of the existing facility & outfall was well researched in detail in the EPA 201 Facility Plan of the late 1970s and the present site was selected in strict conformance with all NEPA requirements.

5. Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing nonenvironmental benefits?

   The proposed improvements are the best and most economical mitigating measure available to offer protection to the environment. Improvements to the O&M of the existing facility will not improve the quality of the effluent discharged. Flows & loadings to the existing facility are continuing to grow & have placed a significant burden on the capabilities of the facility. The only alternative to improve the conditions is to construct a new facility to replace the existing facility.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

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